

Application No. 10/736,654

Amendments to the Drawings:

The Drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 9, 18, 23 – 25, 29 A-D and 60 A-D. The Drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference characters(s) not mentioned in the description: 18 A-D, 24 A-D and 25 A-D.

Reference numerals 9 and 23 have been removed from the text of the description. The A - D have been removed from reference numerals 29 and 60 in the text as well, although Applicant believes it is obvious for what the A-D stands for each reference number. Reference numerals 18, 24, and 25 in the text are all indicated as being plural reference numbers and correspond to 18A-D, 24A-D, and 25A-D. Applicants do not believe there is a need to explicitly write A-D next to each numeral as persons skilled in the art reading the application would understand the reference numbers as used. If the Examiner believes it to be necessary, Applicants can further amend the written description to recite A-D after these numerals throughout the application.

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Remarks

Applicants thank the Examiner for his careful consideration of the application.
Claims 1 – 20 are pending in the application.

Claim Objections

Claims 1 is objected to because of the following informalities: Claim 1 states, "A melt assembly . . . wherein the heating device is a positive temperature coefficient (PTC material). Claim 1 has been amended to overcome this objection.

Claim Rejections – 35 USC § 103

Claims 1, 2, 6 – 8, 11, and 12 are rejected under 35 USC § 103(a) as being unpatentable over Jones et al. (US No. 6,530,655) ("Jones") in view of Crawford (US No. 5,784,089) ("Crawford"). These rejections are respectfully traversed.

In claim 1, Applicants recite a melt assembly for use in a phase change printer. The melt assembly includes a drip plate and a self regulating heating device thermally connected to the drip plate, wherein the heating device is a positive temperature coefficient (PTC) material.

The Rejection to claim 1 should be withdrawn as the Examiner has not established that the prior art discloses all the elements of claim 1. Specifically, the Examiner has not established that Jones discloses a drip plate and a self regulating heating device thermally connected to the drip plate, wherein the heating device is a positive temperature coefficient (PTC) material. The Examiner points to Crawford as disclosing a heating device **comprised** of a PTC material. Actually, what Crawford discloses is a heater that includes a PTC material for regulating the output of a heater, *but it is not the heater itself*. Crawford describes the PTC material as regulating the output of the heater itself (see lines 8 – 30 of paragraph 5.) Therefore, the combination of Crawford and Jones do not disclose all the elements of claim 1.

Claims 2, 6 – 8, 11, and 12 should be allowed if claim 1 is allowed as claims 2, 6 – 8, 11, and 12 depend from claim 1. Because the dependent claims should be allowable if the

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Independent claims are allowed, Applicant has chosen not to argue the allowability of some or all of the dependent claims. However, some or all of the rejected dependent claims may be allowable regardless of the allowability of the independent claims.

Claim 20 is rejected under 35 USC § 103(a) as being unpatentable over Jones et al. (US No. 6,530,655) ("Jones") in view of Scheuhing (US No. 5,832,835) ("Scheuhing"). This rejection is respectfully traversed.

In claim 20, Applicants recite an ink loader for use in a phase change ink printer. The ink loader includes at least one channel having an entry end and an exit end and a melt assembly, which includes a non metallic, non ceramic drip plate with first and second sides. The lower portion of the plate is shaped to form a drip point.

To sustain a prima facie case of obviousness based upon a combination of references, the Examiner must point to some suggestion to combine the references. "The prior art must suggest the desirability of the claimed invention. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed Cir. 1990). This suggestion must be found in the prior art, and cannot be based upon Applicants' disclosure. "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." Para-Ordnance Mfg. v. SGS Importers Int'l, 73 F.3d at 1087, 37 USPQ2d at 1239 (Fed. Cir. 1995), citing W. L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d at 1551, 1553, 220 USPQ at 311, 312-13 (Fed Cir. 1983).

While Applicants do not acknowledge disclosure of the elements of the claimed invention by the references, Applicants submit that the Examiner has not identified any suggestion in either of the cited references to combine the various features allegedly taught by their respective references to achieve the invention claimed in this patent application.

Claim 20 should be allowed, as the Examiner has failed to identify a suggestion in either the references or the prior art generally to combine the patents to achieve Applicants' claimed invention. The Examiner relies upon the combination of Jones and Scheuhing for these features, yet the Examiner has not provided sufficient suggestion or motivation to

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combine the disclosure of Jones and Scheuhing. The Examiner has stated that Scheuhing discloses using a plastic surface for a drip plate in contact with ink to facilitate cleaning of the surface of the drip plate. (Actually, the Examiner failed to cite any passages from Scheuhing, and all Applicants' representative can see are a couple lines suggesting use of a "plastic that repels ink" for a doctoring ink cup material. The disclosure appears to assume that plastics that repel ink better than metal exist rather than teaches such a limitation.) However, the Examiner has not established that the patents or the prior art in general suggests the soft doctoring cup of Scheuhing should be combined with drip plate design of Jones.

There are two scenarios by which one could conclude that combining Jones and Scheuhing would be obvious. First, one skilled in the art could consider adding the disclosure of Scheuhing to that of Jones. Jones appears to be directed toward a drip plate for a solid ink printer, which directs ink flow and retains solidified ink. Scheuhing appears to disclose a soft doctoring cup suited for inking non-flat plates, the wall(s) of which may be made of plastic. The Examiner has pointed to no part of Jones that suggests use of a plastic material for the drip plate. Therefore, the Examiner has failed to establish that a person having knowledge of Scheuhing would be motivated to add its disclosure to the disclosure of the Jones patent.

Alternatively, one could start with Scheuhing. Scheuhing appears to be directed toward a soft doctoring cup suited for inking non-flat plates, the wall(s) of which may be made of plastic. The Examiner has pointed to nothing in either Scheuhing or the prior art that suggests melting solid blocks of ink as disclosed in Jones. It is unlikely that one would have combined Jones with Scheuhing other than to create Applicant's invention. Therefore, the Examiner has failed to establish that a person having knowledge of the Jones patent would be motivated to add its disclosure to the disclosure of the Scheuhing patent.

For the foregoing reasons the Examiner has not established that claim 20 is obvious over Jones in view of Scheuhing.

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Allowable Subject Matter

The Examiner has objected to claims 3 – 5 and 9 – 10 as being dependent upon a rejected base claim, but has indicated they would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants are awaiting a final disposition on claim 1 before rewriting these claims in independent form.

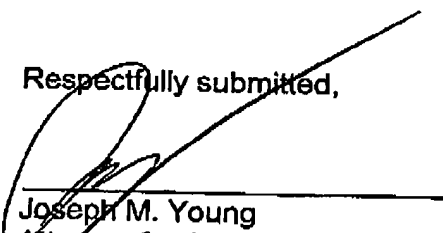
The Examiner has allowed claims 13 – 19.

Conclusion

No additional fee is believed to be required for this amendment. However, the undersigned Xerox Corporation attorney hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025. This also constitutes a request for any needed extension of time and authorization to charge all fees therefor to Xerox Corporation Deposit Account No. 24-0025.

A telephone interview is respectfully requested at the number listed below prior to any further Office Action, i.e., if the Examiner has any remaining questions or issues to address after this paper. The undersigned will be happy to discuss any further Examiner-proposed amendments as may be appropriate.

Respectfully submitted,



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